

What is claimed is:

1. A method for processing continuous tone image data for imaging on a digital output device, the method comprising the steps of:

5 identifying problematic tone levels in the binary representation of an image;  
generating predetermined continuous tone levels based on the identified problematic tone levels; and  
applying data transformation to the corresponding  
10 predetermined continuous tone levels to purposefully avoid or correct the identified problematic tone levels in a binary representation of the image.

2. A method as claimed in claim 1 wherein several adjacent levels in the predetermined continuous tone levels are assigned a same specific tone level  
15 that corresponds with a binary representation that avoids undesirable artifacts.

3. A method for processing continuous tone image data for imaging on a digital output device, the method comprising the steps of:

20 identifying advantageous tone levels in the binary representation of the image;  
generating predetermined continuous tone data levels based on the identified advantageous tone levels; and  
applying data transformation to the predetermined continuous tone data levels to purposefully select identified advantageous  
25 binary tone levels for enhancing a binary representation of the image data.

4. A method claimed in claim 3 wherein specific binary levels that result in full coverage of an area are applied via data transformation to continuous tone text data to assure full character formation in the binary representation.

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5. ~~A method for processing continuous tone image data for imaging on a~~  
digital output device, the method comprising the steps of:

identifying at least one problematic tone level in the binary  
representation of the image;

5 identifying at least one non-problematic tone level in the  
binary representation of the image;

applying data transformation to cause the digital output  
device to replace the at least one problematic tone level in the binary  
representation of the image with output at the at least one non-problematic  
10 tone level in the binary representation of the image.

6. A method as claimed in claim 5 further comprising the steps of:

generating predetermined continuous tone levels based on  
the at least one identified problematic tone level; and

15 generating predetermined continuous tone data levels based  
on the at least one identified non-problematic tone level.

7. A method as claimed in claim 6 wherein several adjacent levels in the  
predetermined continuous tone levels based on the at least one identified  
20 problematic tone level are assigned a same specific tone level that corresponds  
with a binary representation that avoids undesirable artifacts.

8. A method as claimed in claim 6 wherein specific binary levels that result in  
full coverage of an area are applied via data transformation to continuous tone  
25 text data to assure full character formation in the binary representation.

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